

Figure 1: 5Nines:5Minutes High Availability Configuration

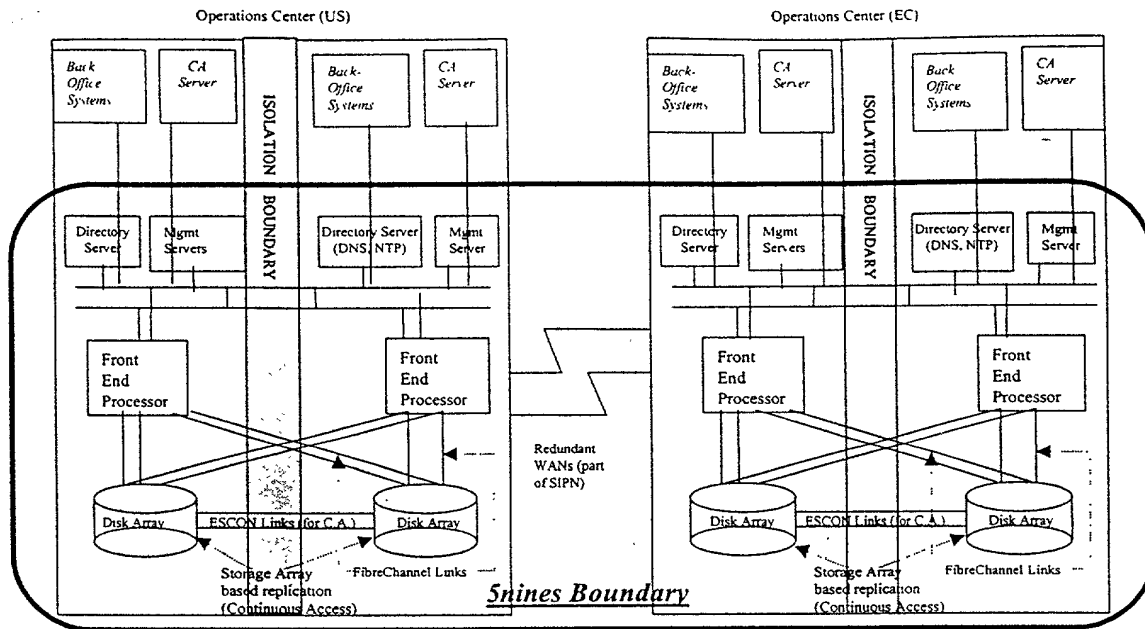


Figure 2: 5nines Architecture Overview – Physical Systems View

The components that are described in this document map onto the systems shown above as follows:

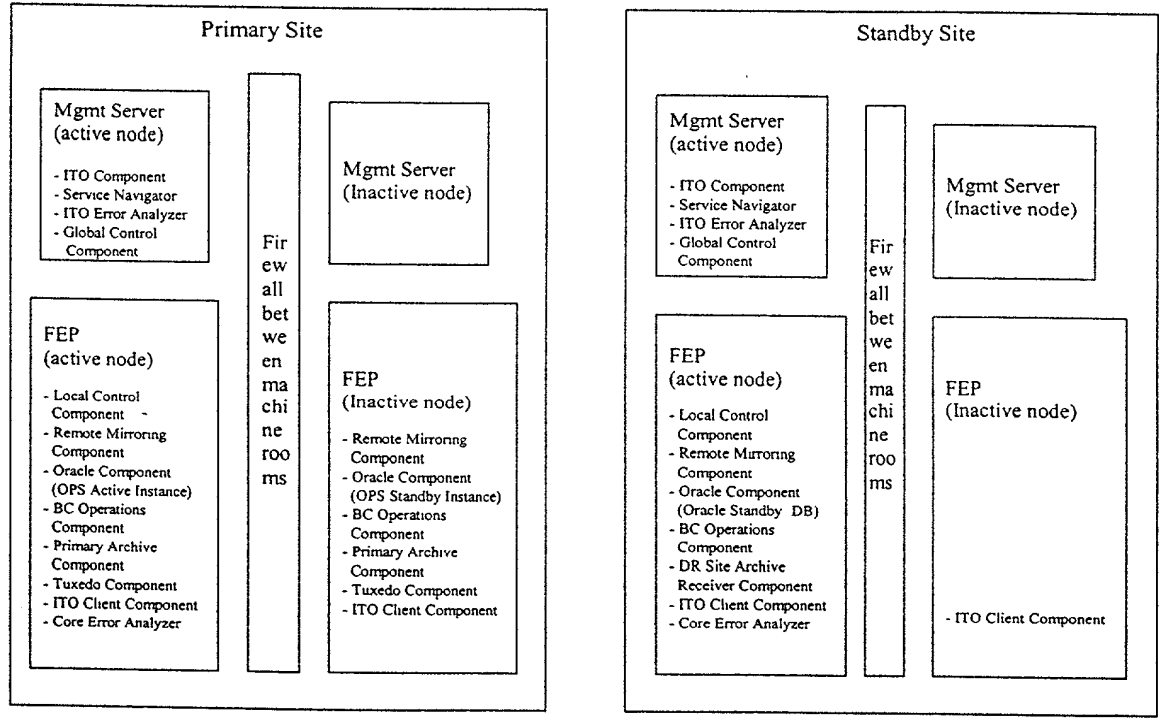


Figure 3: Mapping of Control Components to Physical Systems

## Sample Service Navigator Displays

HP OpenView IT/Operations [15.13.169.71] [opc\_om]

File Edit View Actions Window Help

Operation View

**Nodes**

- Message Groups
- Applications
- Services
  - Site US
    - Site NL
    - FEP Service
      - US Site
        - Global Control US
        - Primary US FEP Service
        - DR US FEP Service
      - NL Site
        - Global Control NL
        - Primary NL FEP Service
          - Cluster NL
            - OPS DB Instance 1
            - OPS DB Instance 2
            - System 2
              - OPS Archiver Instance 1
              - OPS Archiver Instance 2
              - Tuxedo Instance 1
              - Tuxedo Instance 2
              - Tuxedo Access Service
              - Remote Mirroring
              - Business Copy
          - DR NL FEP Service
            - Cluster NL
              - System 1
              - System 2
              - OPS Database
              - OPS Archive Receiver
              - Remote Mirroring Sender
              - Business Copy
                - Cluster NL
                  - System 1
                  - System 2

**Active Messages**

| Severity | SU/LA/ONE | Date     | Time        | Node         | Application   | MsgOrp       |
|----------|-----------|----------|-------------|--------------|---------------|--------------|
| Major    | --X----   | 11/19/99 | 2:23:57 PM  | hp5902.cu... | SNMPTraps     | SNMP 15      |
| Major    | --X----   | 11/19/99 | 2:19:47 PM  | hp5902.cu... | SNMPTraps     | SNMP 15      |
| Warning  | --X----   | 11/19/99 | 11:58:00 AM | hp5902.cu... | HP IT/Oper... | OpC opC      |
| Warning  | --X----   | 11/19/99 | 9:29:27 AM  | hp5902.cu... | HP IT/Oper... | OpC opC      |
| Major    | -X-----   | 11/19/99 | 5:22:21 AM  | hp5902.cu... | state         | state o      |
| Major    | -X-----   | 11/19/99 | 5:22:11 AM  | hp5902.cu... | state         | state o      |
| Major    | -X-----   | 11/19/99 | 4:37:59 AM  | hp5902.cu... | state         | state o      |
| Major    | -X-----   | 11/19/99 | 4:06:23 AM  | hp5902.cu... | state         | state o      |
| Major    | -X-----   | 11/19/99 | 3:38:03 AM  | hp5902.cu... | state         | state o      |
| Major    | -X-----   | 11/19/99 | 3:37:52 AM  | hp5902.cu... | state         | state o      |
| Major    | -X-----   | 11/19/99 | 3:30:57 AM  | hp5902.cu... | state         | state o      |
| Normal   | -----     | 11/19/99 | 3:19:30 AM  | ws719432...  | Security      | Security Log |
| Unknown  | -X-----   | 11/17/99 | 11:57:58 AM | hp5901.cu... | usr/sbin/s... | OS           |
| Unknown  | -X-----   | 11/17/99 | 11:57:58 AM | hp5901.cu... | usr/sbin/s... | OS           |
| Unknown  | -X-----   | 11/17/99 | 11:57:58 AM | hp5901.cu... | usr/sbin/s... | OS           |
| Unknown  | -X-----   | 11/17/99 | 11:57:58 AM | hp5901.cu... | usr/sbin/s... | OS           |
| Unknown  | -X-----   | 11/17/99 | 11:57:58 AM | hp5901.cu... | usr/sbin/s... | OS           |

Ready

Browser displays max 50 messages

Figure 4: Application Service View

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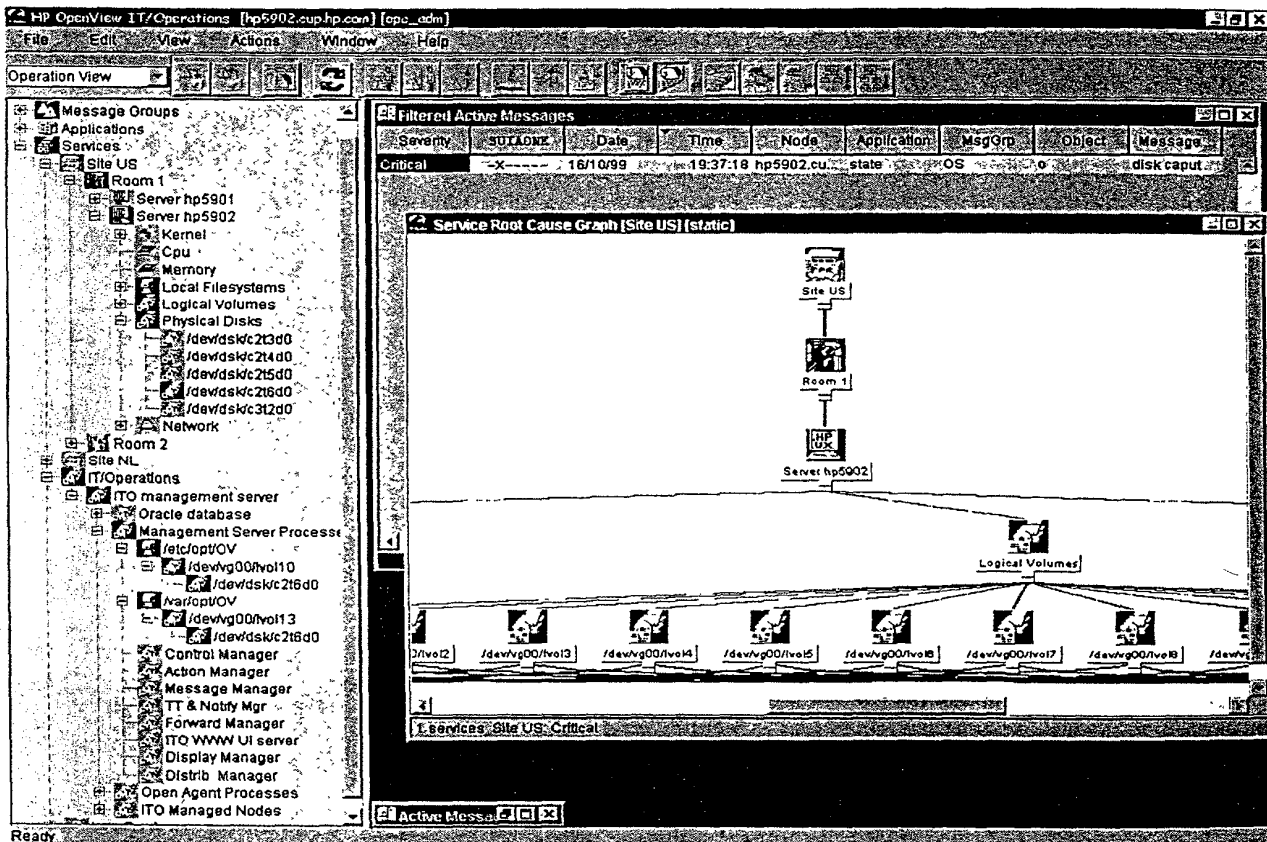


Figure 5 Infrastructure Service View

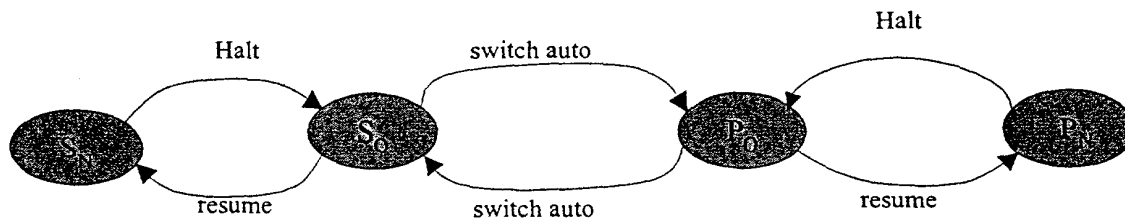
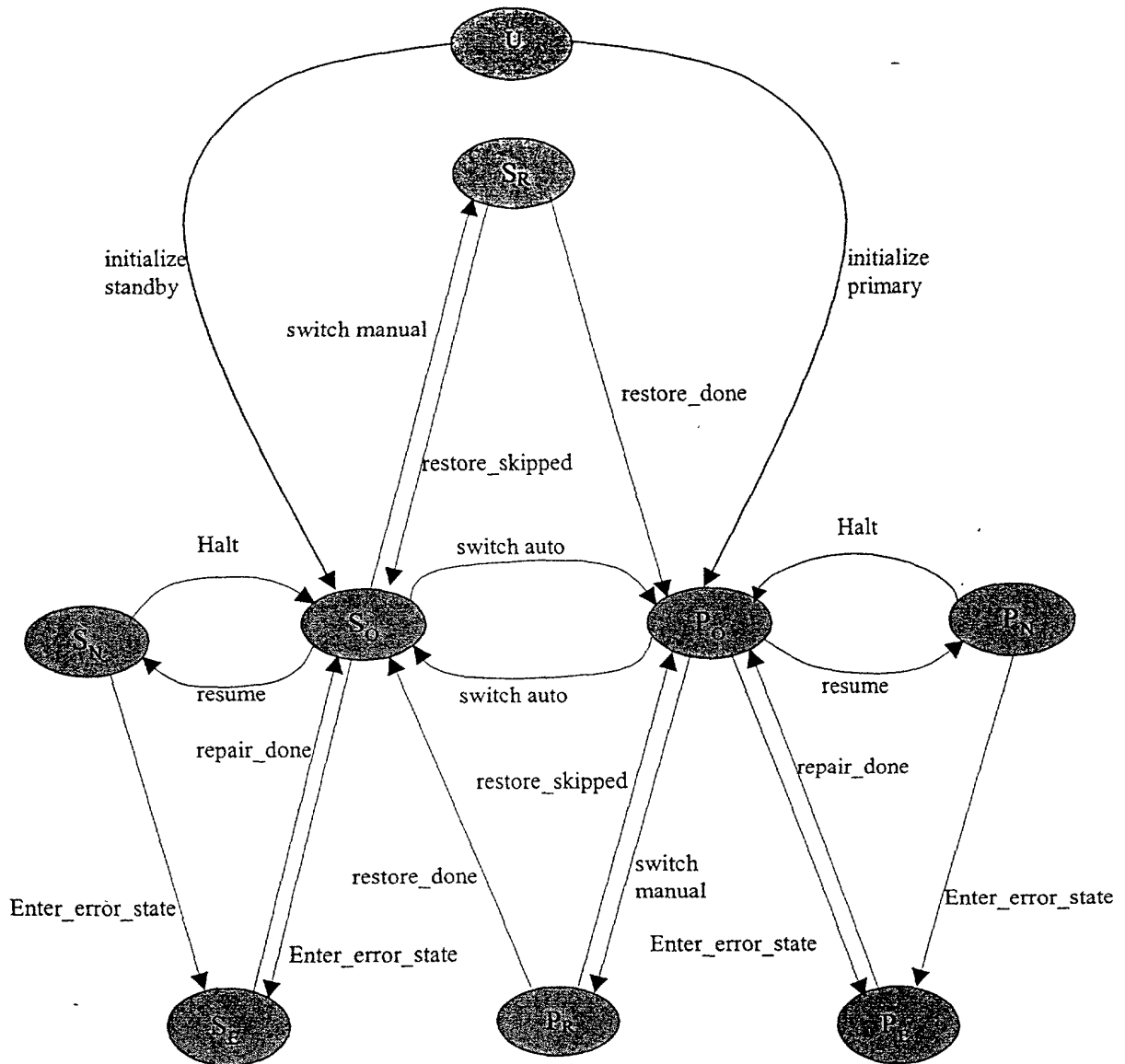


Figure 6: Simplified per-site State Digram  
(Note on symbols:  $S_N$  = Standby Normal,  $S_O$  = Standby Offline,  $P_O$  = Primary Offline,  $P_N$  = Primary Normal.)



#### Service Type

U – Uninitialized or ‘big bang’,

P – Primary, S – Standby

Service State ( for P and S )

N – Normal, O – Offline

R – Restore, E – Error

Figure 7: LCC State Transitions

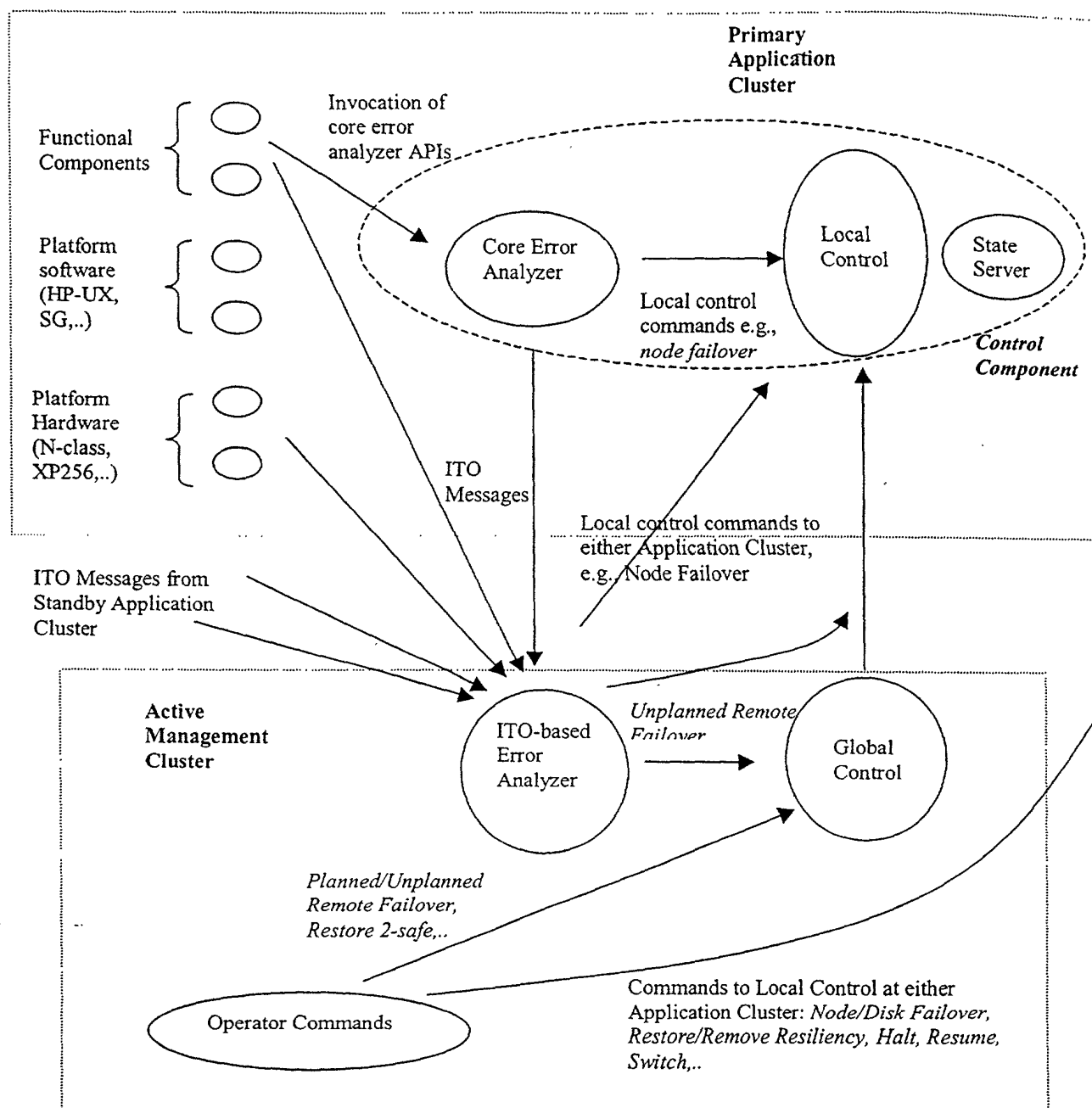


Figure 8: Local Control Environment

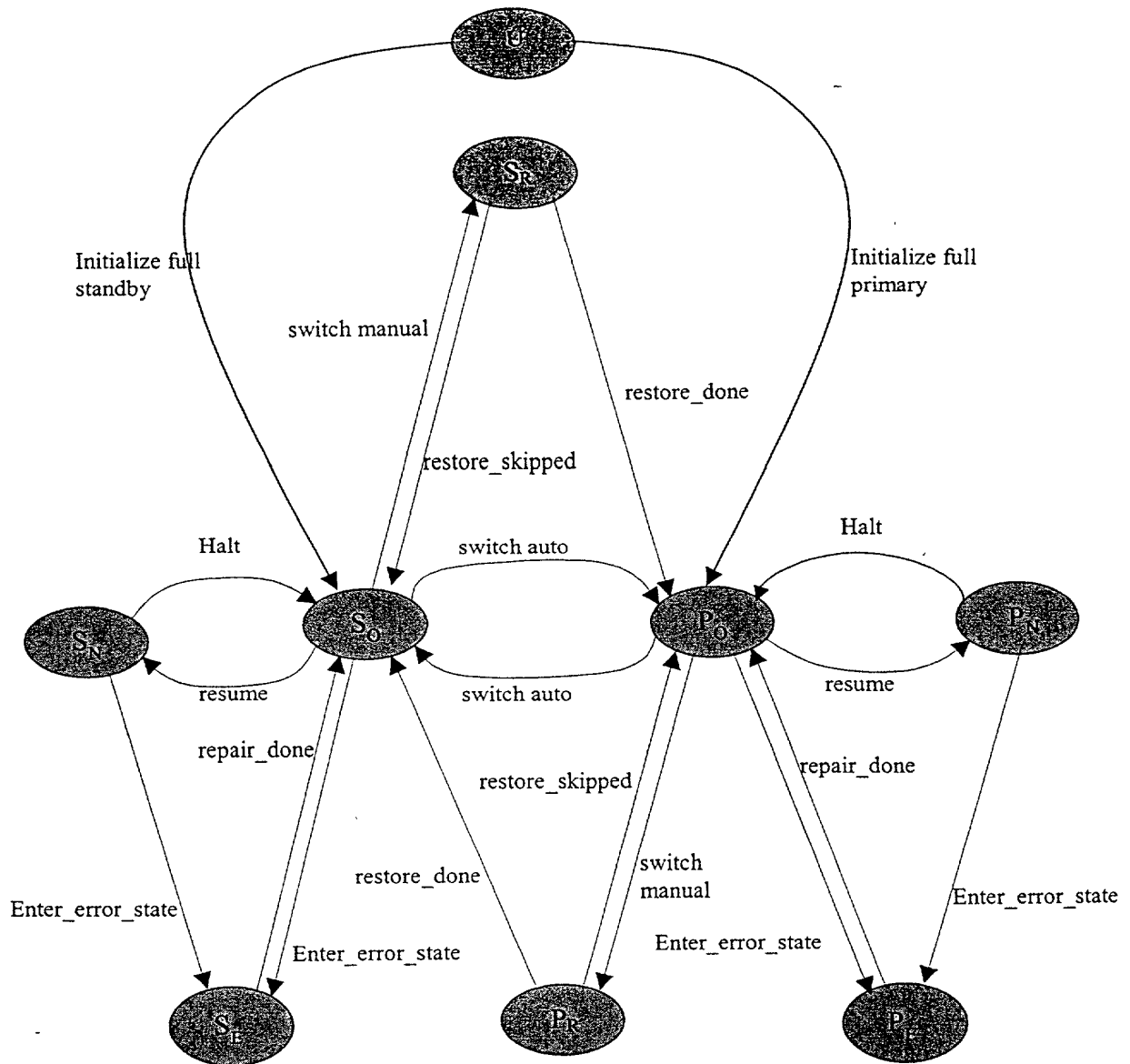


Figure 9: LCC State Transitions